

REMARKS

The undersigned thanks the Examiner for the interview which took place on July 28, 2004.

In the office action, claims 42, 43, 85, and 86 were rejected as being anticipated by U.S. Patent 6,320,577 to Alexander. This rejection is traversed.

At the interview it was agreed that the amendments to the claims distinguished the Alexander reference. Reasons for this distinction which were discussed at the interview are presented below.

The present invention is a computerized method and system which represents network infrastructure or other objects in a spatially distributed environment. As one example, Figures 9 and 10 illustrate associating textual strings and/or graphical icons with locations and/or regions within a 2D or 3D representation of a floor plan of a building, respectively. The environment could be indoor or outdoor, and could be, for example, a street map of a city (see page 38, line 26). Using a pull down window, such as that shown in figure 6 of the application, text strings or icons with associated measurement information or quality measures can be selected and be associated with a defined location or region in the display of the environment, such as region 902, 903 or 904, or point 905, or the counseling room 906, shown in Figure 9 of the application. As explained on page 39 of the application, as an exemplary embodiment of the invention, any reading that is associated with the text string "counseling room 101D" can then be automatically displayed within the computer representation of the environment, and can be edited and changed at any time. This invention, thus, provides the flexibility of site-specific display of collected measurement readings (and/or other quality measures) even though the reading themselves (and/or inputted quality measures) do not contain absolute positioning information such as latitude-longitude coordinates or X,Y, Z coordinates (see page 39, at line 26).

The claimed invention contemplates an association of measurement information and descriptive information for a distributed group of objects or networks, and a display of the measurement information and/or descriptive information in the context of an environmental database (e.g., representing actual

physical objects distributed in physical space).

Claim 42 recites “A method for visualizing a spatially distributed group of physical objects”, and “collecting measurement information and descriptive information... and associating and storing said measurement information and descriptive information”. Claim 42 also recites “obtaining an environmental database model of at least one physical environment in which said objects or networks may be distributed; and displaying at least one of said measurement information and said descriptive information collected in said collecting step together with at least a portion of said environmental database model.”

Claim 85 recites “A system for visualizing a spatially distributed group of physical objects or networks” that includes “at least one of a computer program...or at least one measurement device...which associates said at least one performance metric with descriptive information..wherein the text strings and icons are selected from a predefined set”. Claim 85 also recites “an environmental database model operating in conjunction with said at least one computer, said environmental database model having a computer representation of at least one physical environment in which said physical objects or networks may be distributed”.

As noted above, for exemplary purposes, the apparatus and method might be used to display measured performance characteristics (i.e., measurements) as well as walls and doors (i.e., inputted quality measures, e.g., signal deterioration values) for a communications network having a distributed group of components in the context of a floor plan of a building (i.e., a physical environment which shows spatially distributed physical objects or networks) that has certain room designations (i.e., descriptive information). However, it should be understood that other types of distributed groups of physical objects or networks, in other types of environments, might also be modeled. What is being provided is a display of measurement information and descriptive information in a spatially relevant context (i.e., there physical location as modeled by the environmental database model).

In contrast, Alexander is focused on annotation in a signal measurement system, and with labeling of a waveform (see columns 4, lines 18-25 and 28-43;

column 9, line 64; column 10, line 15; and column 31, lines 47-57). Alexander never teaches a correlation or association of measurements with physical location or with physical objects that could be represented within a portion of an environmental database or distributed in space. In fact, Alexander does not show an environmental database model of at least one physical environment in which said physical objects or networks may be distributed; rather, Alexander shows a display of labeled waveforms and the “objects” in Alexander are computerized objects, not physical objects or networks that can be distributed in physical space, as is the case in the present invention.

We conducted an electronic search of Alexander’s patent 6,320,577 cited by the examiner and found use of the word “location” or “locations” over 100 times. In every instance, Alexander used the word “location” or “locations” to describe position on a waveform display or a measurement display. Alexander never taught an environmental database where the word “location” had the meaning of a spatial location in a physical environment. Alexander clearly limited the meaning of the word “location” to a display screen through his use of that word over 100 times. Alexander never teaches a correlation or association of measurements with physical location or with physical objects that could be represented within a portion of an environmental database or distributed in space. This would not be obvious or anticipated by Alexander to one skilled in the art.

We conducted an electronic search of Alexander’s patent 6,320,577 cited by the examiner and found use of the words “position” or “positions” over 90 times. In every instance, Alexander used the word “position” or “positions” as describing the relative location of an annotation label on a display. Alexander never teaches an environmental database where the word “position” had the meaning of a spatial position in a physical environment. Alexander clearly limited the use of the word “position” to a display screen through his use of that word over 90 times. Alexander never teaches a correlation or association of measurements with physical location or with physical objects that could be represented within a portion of an environmental database or distributed in space. This would not be obvious or anticipated by Alexander to one skilled in the art.

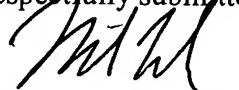
We conducted an electronic search of Alexander’s patent 6,320,577 cited

by the examiner and found use of the word "environment" twice. In each instance, Alexander used the word "environment" as meaning a graphical environment, such as contemplated with a graphical user interface. Alexander never taught that the word "environment" had the meaning associated with an environmental database containing spatial information of one or more physical environments. Alexander clearly limited the word "environment" to mean a graphical display screen. Alexander never teaches a correlation or association of measurements with physical location or with physical objects that could be represented within a portion of an environmental database or distributed in space. This would not be obvious or anticipated by Alexander to one skilled in the art.

From column 31, lines 47-57 of Alexander, it is very clear that Alexander's invention allows a user to annotate any display. However, Alexander never contemplates location data pertaining to a physical environment, such as would be contained in a portion of an environmental database model. Alexander never contemplates the tying together of measurements with locations of objects in a physical environment. Alexander fails to associate any item with a physical location in the real world, as the pioneering invention has done. Alexander only deals with location on a display screen. Alexander's discussion on column 31, lines 43-64, as cited by the examiner would not allow one skilled in the art to create the claimed invention, which relies upon at least some knowledge of an environment (physical environment) or location.

In view of the above, claims 42, 43, 85, and 86 are now in condition for allowance. Reconsideration and allowance at an early date is requested.

Respectfully submitted,



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